#### **MATERIAL SAFETY DATA SHEET**



#### SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifiers

Product name : Tetrabutyl Ammonium Chloride

CAS-No. : 1112-67-0

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratorychemicals, Industrial & for professional use only.

1.3 Details of the supplier of the safety data sheet

Company : Swadesh Life Science

H-103, Sumel 7, Near Soni ni chali

BRTS, Rakhiyal,

Ahmedabad, Gujarat, India

#### **SECTION 2: Hazards identification**

# 2.1 Classification of the substance or mixture Classification according to Regulation (EC) No 1272/2008

Skin irritation (Category 2), H315 Eye irritation (Category 2), H319

For the full text of the H-Statements mentioned in this Section, see Section 16.

# $\Diamond$

#### 2.2 Label elements Labelling according Regulation (EC) No 1272/2008 Pictogram

Signal word Warning

Hazard statement(s)

H315 Causes skin irritation.

H319 Causes serious eye irritation.

Precautionarystatement(s)

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing.

Supplemental Hazard

Statements

none

#### 2.3 Other hazards

This substance/mixturecontains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

# SECTION 3: Composition/information on ingredients

3.1 Substances

Formula : [CH3(CH2)3]4NCI Molecular weight : 277.92 g/mol CAS-No. : 1112-67-0 EC-No. : 214-195-7

#### **MATERIAL SAFETY DATA SHEET**



#### Hazardous ingredients according to Regulation (EC) No 1272/2008

Component Concentration

### **Tetbutylammonium Chloride**

CAS-No. 1112-67-0 <= 100 % EC-No. 214-195-7

#### **SECTION 4: First aid measures**

#### 4.1 Description of first aid measures General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

#### If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

#### In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

#### In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

#### If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

#### 4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling

#### 4.3 Indication of any immediate medical attention and special treatment needed

No data available

#### **SECTION 5: Firefighting measures**

#### 5.1 Extinguishing media Suitable

#### extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

### 5.2 Special hazards arising from the substance or mixture

Carbon oxides, Nitrogen oxides (NOx), Hydrogen chloride gas

#### 5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

#### 5.4 Further information

No data available

#### **SECTION 6: Accidental release measures**

#### 6.1Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Avoid breathing dust. For personal protection see section 8.

#### 6.2 Environmental precautions

Do not let product enter drains.

# 6.3 Methods and materials for containment and cleaning up

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

#### **MATERIAL SAFETY DATA SHEET**



#### **SECTION 7: Handling and storage**

#### 7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed.

#### 7.2 Conditions for safe storage, including any incompatibilities

Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

hygroscopic Store under inert gas.

Storage class (TRGS 510): Non Combustible Solids

#### 7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

#### **SECTION 8: Exposure controls/personalprotection**

#### 8.1 Control parameters

#### 8.2 Exposure controls Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

#### Personal protective equipment Eye/face protection

Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

#### Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

#### **Body Protection**

Impervious clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

# Respiratory protection

For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle r (US) or type ABEKP2 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

### Control of environmental exposure

Do not let product enter drains.

#### **SECTION 9: Physical and chemical properties**

#### 9.1 Information on basic physical and chemical properties

a) Appearance Form: crystalline

Colour: white

b) Odour No data available

c) Odour Threshold No data available

d) pH 5 - 8 at 100 g/l at 20 °C

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e) Melting point/freezing Melting point/range: 47 - 50 °C

point

f) Initial boiling point and No data available boiling range

Flash point 113 °C - closed cup

h) Evaporation rate No data available
i) Flammability(solid, gas) No data available

Upper/lower flammabilityor explosive limits

k) Vapour pressure No data availablel) Vapour density No data availablem) Relative density No data available

n) Water solubility soluble

o) Partition coefficient: log Pow: 1.71 at 20 °C

noctanol/water

p) Auto-ignition No data available temperature

q) Decomposition

No data available

No data available

temperature

r) Viscosity No data availables) Explosive properties No data available

t) Oxidizing properties No data available

9.2 Other safety information

Bulk density 700 kg/m3

#### **SECTION 10: Stability and reactivity**

10.1 Reactivity

No data available

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

No data available

10.4 Conditions to avoid

No data available

10.5 Incompatible materials

Strong oxidizing agents

10.6 Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides, Nitrogen oxides (NOx), Hydrogen chloride gas

Other decomposition products - No data available

#### **SECTION 11: Toxicological information**

### 11.1 Information on toxicological effects Acute toxicity

No data availableTetrabutylammonium chloride

#### Skin corrosion/irritation

No data available(Tetrabutylammonium chloride)

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# Serious eye damage/eye irritation

No data available(Tetrabutylammonium chloride)

### Respiratory or skin sensitisation

No data available(Tetrabutylammonium chloride)

#### Germ cell mutagenicity

No data available(Tetrabutylammonium chloride)

#### Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

#### Reproductive toxicity

No data available(Tetrabutylammonium chloride)

# Specific target organ toxicity - single exposure

No data available(Tetrabutylammonium chloride)

### Specific target organ toxicity - repeated exposure

No data available

#### **Aspiration hazard**

No data available(Tetrabutylammonium chloride)

#### **Additional Information**

RTECS: Not available

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated. (Tetrabutylammonium chloride)

#### **SECTION 12: Ecological information**

#### **12.1 Toxicity** No data

available

#### 12.2 Persistence and degradability

No data available

#### 12.3 Bioaccumulativepotential

No data available

#### 12.4 Mobility in soil

No data available(Tetrabutylammonium chloride)

#### 12.5 Results of PBT and vPvB assessment

This substance/mixturecontains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

#### 12.6 Other adverse effects No

data available

#### **SECTION 13: Disposal considerations**

#### 13.1 Waste treatment methods Product

Offer surplus and non-recyclable solutions to a licensed disposal company. Dissolve or mix the material with a combustible solvent and burn in a chem scrubber.

#### Contaminated packaging

Dispose of as unused product.